PATENT COOPERATION TREATY

4015-5253 official com PURN

From the INTERNATIONAL SEARCHING AUTHORITY

To: COATS & BENNETT, PLLC Attn. Owen, John R. Post Office Box 5

Raleigh, NC 27602 UNITED STATES OF AMERICA **PCT**

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

SEARCHING AUTHORITY, OR THE DECLARATION 3 MO. 08/19/05
22 MO. 10/24/05

	22///		
·	(PCT Rule 44.1)		
	Date of mailing (day/month/year) 25/05/2005		
Applicant's or agent's file reference			
4015-5253	FOR FURTHER ACTION See paragraphs 1 and 4 below		
International application No.	International filing date		
PCT/US2004/039014	(day/month/year) 19/11/2004		
Applicant			
TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)			

1. X	The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
	Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):
	When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.
	Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41–22) 740.14.35
	For more detailed instructions, see the notes on the accompanying sheet.
2.	The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3.	With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
	the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
	no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4. Rem	ninders
Cha	the other than against on a fig

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90*bis*.1 and 90*bis*.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority

European Patent Office, P.B. 5818 Patentlaan 2 NL–2280 HV Rijswijk

Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

Fax: (+31-70) 340-3016

Authorized officer

Nonna Häyrinen



Sequeles on accompanying sheet)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international policiation. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been its filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new:
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
 claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 - "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220				
4015-5253	ACTION	as well	as well as, where applicable, item 5 below.			
International application No.	International filing date (day/mon	onth/year) (Earliest) Priority Date (day/month/year)				
PCT/US2004/039014	19/11/2004 29/12/2003		29/12/2003			
Applicant						
TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)						
This International Search Report has been according to Article 18. A copy is being tra			nority and is transmitted to the applicant			
This International Search Report consists	of a total of <u>4</u> sl	neets.				
X It is also accompanied by	a copy of each prior art document	cited in this	report.			
	international search was carried ou ess otherwise indicated under this		sis of the international application in the			
The international this Authority (Rul		s of a transl	ation of the international application furnished to			
b. With regard to any nucleo	otide and/or amino acid sequenc	e disclosed	in the international application, see Box No. I.			
2. Certain claims were foul	nd unsearchable (See Box II).					
3. Unity of invention is lack	Unity of invention is lacking (see Box III).					
4. With regard to the title,						
X the text is approved as su	• • • •					
the text has been establis	hed by this Authority to read as fol	ows:				
			-			
5. With regard to the abstract,						
the text is approved as su		thic Authori	ity as it appears in Box No. IV. The applicant			
			ch report, submit comments to this Authority.			
6. With regard to the drawings ,						
a. the figure of the drawings to be p	oublished with the abstract is Figure	No2				
as suggested by t	, ,	falla - Li.				
	s Authority, because the applicant s Authority, because this figure be					
	e published with the abstract.	Granacte	Sizes de inventoria			

INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/039014

a. classification of subject matter IPC 7 H04Q7/38 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) H04Q IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category 9 X EP 1 304 900 A (NEC CORPORATION) 40 - 5123 April 2003 (2003-04-23) 1 - 39. 52-67 paragraph '0001! - paragraph '0008! paragraph '0061! - paragraph '0069! figures 21-24 US 2003/123396 A1 (SEO MYEONG-SOOK ET AL) Y 1 - 3952-67 3 July 2003 (2003-07-03) figures 1-21 paragraph '0009! - paragraph '0044! paragraph '0067! - paragraph '0161! -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the 'A' document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 11 May 2005 25/05/2005 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

1

Gavin Alarcon, O

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/039014

			7039014
	Atton) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	T E	Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, or the relevant passages		nelevant to claim No.
X	WO 00/70897 A (TELEFONAKTIEBOLAGET LM ERICSSON) 23 November 2000 (2000-11-23) page 3, line 28 - page 6, line 24 page 10, line 3 - page 14, line 26 figures 1a,1b,1c,2-15		1-13, 21-27, 35-67
X	page 10, line 3 - page 14, line 26 figures la,lb,lc,2-15 WO 99/43178 A (NOKIA TELECOMMUNICATIONS OY; SALONAHO, OSCAR; SIPILAE, KARI) 26 August 1999 (1999-08-26) abstract page 2, line 36 - page 5, line 27 page 6, line 4 - page 7, line 15 page 9, line 10 - line 26 page 12, line 35 - page 13, line 17 page 15, line 3 - page 19, line 20 figures 1-10		1-13, 21-27, 35-67

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/039014

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1304900	A	23-04-2003	CA CN EP JP US	2408423 A1 1491049 A 1304900 A2 2003199173 A 2003073409 A1	17-04-2003 21-04-2004 23-04-2003 11-07-2003 17-04-2003
US 2003123396	A1	03-07-2003	KR	2003037611 A	14-05-2003
WO 0070897	A	23-11-2000	US AU BR CN EP JP WO TW	6445917 B1 774570 B2 4963500 A 0010645 A 1371579 A 1179273 A1 2003500909 T 0070897 A1 502547 B 200109230 A	03-09-2002 01-07-2004 05-12-2000 19-02-2002 25-09-2002 13-02-2002 07-01-2003 23-11-2000 11-09-2002 08-11-2002
WO 9943178	A	26-08-1999	FI AU CA CN DE DE EP EP ES WO JP	980357 A 2282799 A 2320775 A1 1291413 A 69907877 D1 69907877 T2 1276344 A1 1057357 A1 2198883 T3 9943178 A1 2002504792 T	18-08-1999 06-09-1999 26-08-1999 11-04-2001 18-06-2003 19-05-2004 15-01-2003 06-12-2000 01-02-2004 26-08-1999 12-02-2002

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
FADED TEXT OR DRAWING
BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
D

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.